U.S. Department of the Interior Bureau of Land Management Glenwood Springs Field Office 50629 US Highway 6 & 24 Glenwood Springs, CO 81601

ENVIRONMENTAL ASSESSMENT

<u>NUMBER</u>: DOI-BLM-CO-N040-2009-0051-EA <u>CASEFILE/PROJECT NUMBER (optional)</u>: 0507516 <u>PROJECT NAME</u>: Grazing Permit Renewal <u>PLANNING UNIT</u>: Rifle LEGAL DESCRIPTION: T7S, R94W (See attached map) Spruce Gulch allotment #08121

<u>APPLICANT</u>: Grazing Permittee

DESCRIPTION OF BACKGROUND, PROPOSED ACTION AND ALTERNATIVES:

<u>BACKGROUND</u>: A Land Health Assessment and determination document was completed for this allotment and signed on 8/31/2005. The determination was that rangelands were not meeting or making significant progress toward meeting Standard 3 for healthy animal communities primarily due to habitat loss and fragmentation associated with intensive oil and gas development in the area. Existing livestock grazing was not a significant cause of the failure to meet the standard. This permit authorizes grazing during most of the growing season. Livestock will be rotated throughout the allotment to allow for periods of growing season rest. Some livestock are also moved up to the White River National Forest during the summer months.

<u>DESCRIPTION OF PROPOSED ACTION</u>: The Proposed Action is to renew a term grazing permit for the above applicant. The number/kind of livestock, period of use, percent public land and Animal Unit Months (AUMS) will remain the same as the previous permit. The permit will be issued for a 10-year period, unless the base property is leased for less, but for purposes of the EA, we are assuming 10 years of grazing by this or another applicant (in case of transfer). The proposed actions are in accordance with 43 CFR 4130.2. The tables below summarize the scheduled grazing use and grazing preference for the permit.

Authorized Grazing Use:

Allotment Name/#	Livestock Kind & #	Use Period	% Public Land	AUMs
Spruce Gulch #08121	Cattle 14	05/15 - 9/30	80	51

Grazing Preference (AUMs):

Allotment Name	Active AUMs	Suspended AUMs	Total AUMs
Spruce Gulch #08121	51	0	51

The following terms and conditions that existed on the previous permit will also be carried forward on the renewed permit:

The permittee and all persons specifically associated with grazing operations must be informed that any objects or sites of cultural, paleontological, or scientific value such as historic or prehistoric resources, graves or grave markers, human remains, ruins, cabins, rock art, fossils, or artifacts shall not be damaged, destroyed, removed, moved, or disturbed. If in connection with allotment operations under this authorization any of the above resources are encountered, the proponent shall immediately suspend all activities in the immediate vicinity of the discovery that might further disturb such materials and notify the BLM authorized officer of the findings. The discovery must be protected until notified in writing to proceed by the authorized officer (36CFR800.110 & 112, 43CFR 0.4).

Maintenance of range improvements shall be in accordance with all approved cooperative agreements and range improvement permits. Maintenance shall be completed prior to turnout.

ALTERNATIVES CONSIDERED BUT ELIMINATED:

The No Grazing alternative has been eliminated from further consideration. No unresolved conflicts involving alternative use of available resources have been identified. Discontinuing grazing use would not lead to significant improvements to Land Health. For this reason, discontinuance of grazing use (No Grazing) will not be considered or assessed.

NEED FOR PROPOSED ACTION:

The action is needed for the following reasons: (1) to meet the livestock grazing management objective of the Resource Management Plan of providing 56,885 animal unit months of livestock forage commensurate with meeting public land health standards, (2) to continue to allow livestock grazing on the specified allotment, (3) to meet the forage demands of local livestock operations, (4) to provide stability to these operations and help preserve their rural agricultural lands for open space and wildlife habitat,(5) to allow use of native rangeland resource for conversion into protein suitable for human consumption, and (6) to meet the Guidelines for Livestock Grazing Management and the Standards for Land Health.

PLAN CONFORMANCE REVIEW:

The proposed action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

Name of Plan: Glenwood Springs Resource Management Plan.

<u>Date Approved</u>: Jan. 1984, revised 1988, amended in November 1991 - Oil and Gas Leasing and Development - Final Supplemental Environmental Impact Statement; amended Nov. 1996 -<u>Colorado Standards and Guidelines</u>; amended in August 1997 - <u>Castle Peak Travel Management</u> <u>Plan</u>; amended in March 1999 - Oil and Gas Leasing & Development Final Supplemental Environmental Impact Statement; amended in November 1999 - Red Hill Plan Amendment; and amended in September 2002 – Fire Management Plan for Wildland Fire Management and Prescriptive Vegetation Treatment Guidance.

<u>Decision Number/Page</u>: The action is in conformance with Administrative Actions (pg. 5) and Livestock Grazing Management (pg. 20).

<u>Decision Language</u>: Administrative actions states, "Various types of actions will require special attention beyond the scope of this plan. Administrative actions are the day-to-day transactions required to serve the public and to provide optimal use of the resources. These actions are in conformance with the plan". The livestock grazing management objective as amended states, "To provide 56,885 animal unit months of livestock forage commensurate with meeting public land health standards."

Standards for Public Land Health:

In January 1997, Colorado BLM approved the Standards for Public Land Health. The five standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands.

In 2004, the BLM Glenwood Springs Field Office staff conducted a formal land health assessment on the Rifle-West Watershed which encompasses the Spruce Gulch Allotment. The Determination Document, signed on August 31, 2005, found that the northern portions of the Spruce Gulch Allotment were not meeting Standard 3 for wildlife. This standard was not met because of the cumulative loss and fragmentation of habitat throughout the landscape due to intensive oil and gas development. Human use increases in the area have displaced animals out of important big game winter range habitats.

Standard 3 for plant communities was being met; however, problems were noted with the health of the vegetative communities. Sagebrush was dominated by old, decadent sagebrush with poor recruitment of younger age classes. Pinyon-juniper encroachment into sagebrush communities was also widespread throughout the allotment. Existing livestock grazing was not considered a significant contributing factor to the current land health conditions.

This environmental analysis must address whether the proposed action or alternatives being analyzed would result in impacts that would maintain, improve, or deteriorate land health conditions relative to these five standards.

<u>COMPLIANCE WITH SECTION 302 OF FLPMA RELATIVE TO THE COMB WASH</u> <u>DECISION</u>

A review of applicable planning documents and a thoughtful consideration of new issues and new demands for the use of the public lands involved in this allotment have been made. This analysis concludes that the current land and resource uses are appropriate.

Reasons for the conclusion are: No new issues or new demands for the use of public lands involved in this grazing allotment have been identified since approval of the land use plan and amendments.

AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This section provides a description of the human and natural environmental resources that could be affected by the proposed action and no action alternative. In addition, the section presents comparative analyses of the direct and indirect consequences on the affected environment stemming from the implementation of the various actions.

A variety of laws, regulations, and policy directives mandate the evaluation of the effects of a proposed action and alternative(s) on certain critical environmental elements. Not all of the critical elements that require inclusion in this EA are present, or if they are present, may not be affected by the proposed action and alternative (Table 2). Only those mandatory critical elements that are present and affected are described in the following narrative.

In addition to the mandatory critical elements, there are additional resources that would be impacted by the proposed action and alternative. These are presented under <u>Other Affected</u> <u>Resources.</u>

Table 2. Critical Ele	Table 2. Critical Elements of the Human Environment								
Critical Element	Present Affected		ed Give LEI		Present		Affected		
Critical Element	Yes	No	Yes	No	Critical Element	Yes	No	Yes	No
Air Quality		Х		Х	Prime or Unique Farmlands		Х		Х
ACECs		Х		Х	Threatened, Endangered, and Sensitive Species*	Х		Х	
Cultural Resources	Х			Х	Wastes, Hazardous or Solid		Х		Х
Environmental Justice	Х			Х	Water Quality, Surface and Ground*	Х		Х	
Floodplains		Х		Х	Wetlands and Riparian Zones*	Х		Х	
Invasive, Non-native Species	Х			Х	Wild and Scenic Rivers		Х		Х
Migratory Birds	Х			Х	Wilderness/				
Native American Religious Concerns		Х		Х	WSAs		Х		Х

* Public Land Health Standard

CRITICAL ELEMENTS

CULTURAL RESOURCES and NATIVE AMERICAN RELIGIOUS CONCERNS

Affected Environment: Range permit renewals are undertakings under Section 106 of the National Historic Preservation Act. Additional range improvements (e.g., fences, spring improvements) are subject to compliance requirements under Section 106 and will undergo standard cultural resources inventory and evaluation procedures. During Section 106 review, a cultural resource assessment (GSFO #1009-17) was completed for the

Spruce Gulch Common Allotment on February 18, 2009 following the procedures and guidance outlined in the 1980 National Programmatic Agreement Regarding the Livestock Grazing and Range Improvement Program, IM-WO-99-039, IM-CO-99-007, IM-CO-99-019, CO-2001-026, and CO-2002-029. The results of the assessment are summarized in the table below. A copy of the cultural resource assessment is available at the GSFO office.

Allotment Number	Acres Inventoried at a Class III level	Acres NOT Inventoried at a Class III Level	Percent (%) Allotment Inventory data Class III level	Number of Cultural Resources known in allotment	High Potential of Historic Properties (yes/no)	Management Recommendations (Additional inventory required and historic properties to be visited)
Spruce Gulch Com.	2048	944	68	24	No	No additional acres need to be inventoried to meet the 10% sampling threshold. 19% of the allotment has 30%+ slopes.
Total	2048	944	68	24		

Twenty-one Class III cultural resource inventories have been conducted within this allotment mostly for oil and gas development. These surveys have resulted in the recording of four historic properties. Historic properties are cultural resources that are considered eligible or potentially eligible for listing on the National Register of Historic Places that need to be preserved. If they cannot be avoided, the adverse impacts must be mitigated. Based on available data, there is a moderate potential for historic properties within the allotment. Undiscovered historic era sites within this allotment could represent a time frame from the late 1800's through the 1950's; Native American sites could represent a time range from 200 to 10,000 years before present.

Subsequent site field visits, inventory, and periodic monitoring may have to be done to identify if additional historic properties are present within the term of the permit and as funds are made available. If the BLM determines that grazing activities will adversely impact the properties, mitigation will be identified and implemented in consultation with the Colorado SHPO.

At present, there are no known areas of Native American concern within this allotment. On November 7, 2008 the Glenwood Springs Field Office mailed an informational letter and maps to the Ute Tribe (Northern Ute Tribe), Southern Ute Tribe, and the Ute Mountain Ute Tribe, identifying the proposed 2009 grazing permit renewals. No response has been received. If new data is disclosed, new terms and conditions may have to be added to the permit to accommodate their concerns. The BLM will take no action that would adversely affect these areas or location without consultation with the appropriate Native Americans. Environmental Consequences: The direct impacts that occur where livestock concentrate include trampling, chiseling, and churning of site soils, cultural features, and cultural artifacts, artifact breakage, and impacts from standing, leaning, and rubbing against historic structures, above-ground cultural features, and rock art. Indirect impacts include soil erosion, gullying, and increased potential for unlawful collection and vandalism. Continued grazing may cause substantial ground disturbance and cause cumulative, long term, irreversible adverse effects to historic properties.

Four historic properties were identified during the inventories for this allotment. A determination of "**Conditional No Adverse Affect**" has been made for this renewal. In order to mitigate this potential affect all ground disturbing activity and the placement of supplemental feed, etc, must be at least 100m from the areas of concern. The cultural resource specialist should be involved in discussions for improvements, maintenance, supplemental feeding areas, etc to ensure that the historic properties and area of concern is avoided.

Mitigation: New improvements or maintenance of existing range improvements may require cultural resource inventories, monitoring, and/or data recovery. This allotment may also contain undiscovered historic properties and/or resources protected under the National Historic Preservation Act (NHPA), American Indian Religious Freedom Act, Native American Graves Protection and Repatriation Act, E.O. 13007, or other statutes and executive orders. The BLM may require modification to development proposals to protect such properties, or disapprove any activity that is likely to result in damage to historic properties or areas of Native American concern.

Education/Discovery stipulation: The permittee and all persons specifically associated with grazing operations must be informed that any objects or sites of cultural, paleontological, or scientific value such as historic or prehistoric resources, graves or grave markers, human remains, ruins, cabins, rock art, fossils, or artifacts shall not be damaged, destroyed, removed, moved, or disturbed. If in connection with allotment operations under this authorization any of the above resources are encountered, the proponent shall immediately suspend all activities in the immediate vicinity of the discovery that might further disturb such materials and notify the BLM authorized officer of the findings. The discovery must be protected until notified in writing to proceed by the authorized officer (36CFR800.110 & 112, 43CFR 0.4).

ENVIRONMENTAL JUSTICE

Affected Environment: Review of 2004 data from US Census Bureau indicates the median annual income of Garfield County averages \$50,119 and is neither an impoverished or wealthy county. Median annual income of Mesa County averages \$40,045 and is not an impoverished or wealthy county. U.S. Census Bureau data from 2006 shows the minority population of Garfield and Mesa County comprises less than 0.7 % of the total population of Colorado^a.

^a Source U.S. Census Bureau: State and County QuickFacts. Data derived from Population Estimates, Census of Population and Housing, Small Area Income and Poverty Estimates, State and County Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic

Garfield County	Mesa County
Median Household Income (2004)	Median Household Income (2004)
Estimate	Estimate
\$50,119	\$40,045

Environmental Consequences/Mitigation: The proposed action and alternatives are not expected to create a disproportionately high and adverse human health impact or environmental effect on minority or low-income populations within the area.

INVASIVE, NON-NATIVE SPECIES

Affected Environment: Noxious weed infestation reports identify plumeless thistle (*Carduus acanthoides*), and Russian knapweed (*Acroptilon repens*) occur within the Spruce Gulch Allotment.

Rangeland health assessments were conducted in 2004 on the Spruce Gulch Allotment. The allotment was said to be in a general healthy state except for the presence of old, decadent sagebrush and encroachment of pinion/juniper communities. Also, oil and gas operations have fragmented the landscape with roads and pads causing a significant amount of surface disturbance.

Environmental Consequences/Mitigation: As livestock come in contact with noxious and invasive weed species they will continue to transport seed via coat and feces to other areas of the allotments. The seeds will most likely germinate and become established in areas of surface disturbance or areas of poor rangeland condition. Continued livestock operations on this allotment are not expected to significantly increase the presence or establishment of noxious and invasive plant species.

MIGRATORY BIRDS

Affected Environment:

The 1988 amendment to the Fish and Wildlife Conservation Act mandates the U.S. Fish and Wildlife Service (USFWS) to "identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act (ESA) of 1973." *Birds of Conservation Concern 2008* (*http://www.fws.gov/migratorybirds/reports/BCC2008/BCC2008m.pdf*) is the most recent effort to carry out this mandate. The conservation concerns may be the result of population declines, naturally or human-caused small ranges or population sizes, threats to habitat, or other factors. The primary statutory authority for *Birds of Conservation Concern 2008* (*BCC 2008*) is the Fish and Wildlife Conservation Act of 1980 (FWCA), as amended. Although there are general patterns that can be inferred, there is no single reason why any species was is on the list. The

Census, Survey of Business Owners, Building Permits, Consolidated Federal Funds Report Last Revised: Wednesday, 02-Jan-2008 15:11:03

Glenwood Springs Field Office is within the Southern Rockies/Colorado Plateau Bird Conservation Region (BCR). The 2008 list include the following birds: Gunnison Sage Grouse, American Bittern, Bald Eagle, Ferruginous Hawk, Golden Eagle, Peregrine Falcon, Prairie Falcon, Snowy Plover, Mountain Plover, Long-billed Curlew, Yellow-billed Cuckoo, Burrowing Owl, Lewis's Woodpecker, Willow Flycatcher, Gray Vireo, Pinyon Jay, Juniper Titmouse, Veery, Bendire's Thrasher, Grace's Warbler, Brewer's Sparrow, Grasshopper Sparrow, Chestnut-collared Longspur, Black Rosy-Finch, Brown-capped Rosy-Finch, and Cassin's Finch.

Habitat loss due to alteration or destruction continues to be the major reason for the declines of many species (<u>http://www.fws.gov/migratorybirds/reports/BCC2008/BCC2008m.pdf</u>). When considering potential impacts to migratory birds the impact on habitat, including: 1) the degree of fragmentation/connectivity expected from the proposed project relative to before the proposed project; and 2) the fragmentation/connectivity within and between habitat types (e.g., within nesting habitat or between nesting and feeding habitats. Continued private land development, surface disturbing actions in key habitats (e.g. riparian areas) and the proliferation of roads, pipelines, powerlines and trails are local factors that reduce habitat quality and quantity.

The GSFO planning area provides both foraging and nesting habitat for a variety of migratory birds that summer, winter, or migrate through the area. The habitat diversity provided by the broad expanses of sagebrush, mixed mountain shrub, aspen, pinyon-juniper woodlands, other types of coniferous forests, and riparian and wetland areas support many bird species. The pinyon jay is characteristically found in pinyon/juniper woodlands and the Brewer's sparrow (*Spizella breweri*) is found within sagebrush habitats. Other Birds of Conservation Concern 2008 may also occur locally. Many species of raptors (red-tailed hawks, golden eagles, northern goshawks, Cooper's hawks, kestrels and owls) not on the Fish & Wildlife Service's Birds of Conservation Concern list also could occur in the area.

Environmental Consequences/Mitigation:

Limited bird count or species data exists for the area, however the greater concern is the continued fragmentation of habitat and losses of large blocks of contiguous habitat required by many bird species. No intentional take of native bird species is anticipated under the proposed action. Grazing by cattle could result in the accidental destruction of ground nests through trampling. This impact is expected to be minimal and isolated and would not influence populations of migratory birds on a landscape level. Given current overall existing habitat condition, livestock grazing, as proposed, will not negatively affect the degree of fragmentation/connectivity expected relative to the existing condition of the allotment and the fragmentation/connectivity within and between habitat types (e.g., within nesting habitat or between nesting and feeding habitats would also likely not change. Overall it is unlikely that, livestock grazing AUMs and duration as proposed with pasture rotation would not reduce the extent or quality of habitat available for migratory bird breeding functions.

THREATENED, ENDANGERED, AND SENSITIVE SPECIES (includes an analysis on Standard 4)

Affected Environment: Listed, Proposed and Candidate Species: According to the latest species list from the U. S. Fish and Wildlife Service (http://mountain-prairie.fws.gov/endspp/CountyLists/COLORADO.htm), the following Federally listed, proposed, or candidate plant and animal species may occur within or be impacted by actions occurring in Garfield County: Colorado hookless cactus (*Sclerocactus glaucus*), Ute Ladies' Tresses orchid (*Spiranthes diluvialis*), Parachute beardtongue (*Penstemon debilis*), DeBeque phacelia (*Phacelia submutica*), Canada lynx (*Lynx canadensis*), Mexican spotted owl (*Strix occidentalis*), yellow-billed cuckoo (*Coccyzus americanus*), razorback sucker (*Xyrauchen texanus*), Colorado pikeminnow (*Ptychocheilus lucius*), bonytail chub (*Gila elegans*), and humpback chub (*Gila cypha*). The U. S. Fish and Wildlife Service announced the delisting of the bald eagle in June, 2007 with an effective date of August 8, 2007. The BLM now considers the bald eagle a sensitive species.

Plants:

No suitable habitat is found on this allotment for any of the four federally-listed, proposed or candidate plant species that occur in Garfield County. No occupied habitat is present within the vicinity that could be indirectly impacted by the proposed action.

Fish:

The Colorado pikeminnow, bonytail, humpback chub, and razorback sucker are all located in the Colorado River. Designated Critical Habitat for the Colorado pikeminnow and razorback sucker is located along the Colorado River and its 100-year floodplain within 0.6 miles of the allotment.

Terrestrial Wildlife:

Canada lynx. Canada lynx are a federally threatened and Colorado endangered species. In 2000, the Canada lynx was listed under the ESA as a threatened species throughout its range in the contiguous United States. In February 2008 the USFWS proposed to revise the amount of critical habitat designated under the ESA for the federally threatened Canada lynx. None of the existing or proposed critical habitat is within the scope of this EA. BLM mapped potential Canada lynx habitat does exist within portions of the area with conifers (see Appendix A).

A site specific consultation was completed for grazing within the Spruce Gulch Common Allotment in November of 2000 for Canada Lynx. Since this time, a formal LHA has been completed. A wildfire burned some of the Canada lynx habitat within this allotment in 2008.

The Spruce Gulch Common Allotment is located in the Rifle-West watershed. A formal LHA was completed for this watershed in 2004/2005. One site within lynx habitat was visited. Mapped habitat in the allotment is located on steep side hills or within steep drainages that are not being accessed by livestock. Lynx habitat in the allotment was in good condition. Understory vegetation was in good condition and aspen and conifer trees were healthy. Based on the overall condition of habitat, Standard 4 for Canada lynx was being met (see attachment A).

BLM Sensitive Species:

Plants:

BLM sensitive plant species with habitat and/or occurrence records in Garfield County include adobe thistle (*Cirsium perplexans*), DeBeque milkvetch (*Astragalus debequaeus*), Naturita milkvetch (*Astragalus naturitensis*), Roan Cliffs blazing star (*Mentzelia rhizomata*), Piceance bladderpod (*Lesquerella parviflora*), and Harrington's penstemon (*Penstemon harringtonii*).

Of these plants, only Harrington's penstemon is known to occur within the Spruce Gulch allotment. This plant species is found in the open, rocky sagebrush/mixed mountain shrublands on the northern portion of the allotment.

Environmental Consequences/Mitigation: Listed, Proposed and Candidate Species:

Plants:

Due to the absence of any occupied or suitable habitat, the proposed action would have **"No Effect"** to any of the four listed, proposed or candidate plant species.

Colorado River Endangered Fishes:

These fish are all native to the Colorado River basin. These species are adapted to the historic natural conditions related to high sediment loads periodically carried by the Colorado River. These fish require periodic influxes of sediment to create and maintain important habitat components. This allotment allows for season long use, but calls for rotation of cattle across the allotment to provide some growing season rest and plant rest and recovery. Continued livestock grazing as proposed would have "**No Effect**" to these fish or their habitat.

Terrestrial Wildlife:

Canada lynx. The proposed action would not result in direct mortality of individual lynx. Excessive losses of forage on a large scale could result in a reduction in hiding and movement cover and directly affect lynx's ability to effectively move through the landscape. This is unlikely from grazing and is more consistent with actions such as a severe wildfire. Indirect impacts associated with grazing are mainly associated with competition between livestock and lynx prey species for available forage. The Canada Lynx Conservation Assessment and Strategy identified that "grazing, in conjunction with increasing elk populations, may have resulted in increased competition for forage resources with lynx prey". In summary, livestock compete with lynx prey species (snowshoe hare, jack rabbits, cottontails, blue grouse, voles, squirrels) for available forage. In addition, livestock can remove hiding cover important to the survival of prey species, which could ultimately result in lower prey species productivity and density.

Appendix A contains a habitat assessment specific to Canada lynx and land health standard 4 for the allotments. In summary, the lynx habitat portions of the allotments provided suitable habitat for lynx and their prey species and grazing management does not appear to be impacting the usability of lynx habitat. The proposed action will not result in the destruction or adverse modification of U.S. Fish & Wildlife Service designated critical habitat. Based on the proposed management, the proposed renewal of this livestock grazing permit "May Affect, but is not likely to Adversely Affect" the Threatened - Canada lynx. Furthermore, the proposed action is in conformance with the recently completed programmatic consultation for lynx regarding the GSFO livestock grazing program. Programmatic consultation for Canada lynx was completed on the entire grazing program as administered by the GSFO. A "May Affect, Not Likely to Adversely Affect" determination was made and concurrence was obtained from the FWS (ES/GJ-6-CO-03-F-013).

BLM Sensitive Species:

Plants

The flowering stalks of Harrington's penstemon are palatable to both livestock and wildlife. The grazing period on the Spruce Gulch allotment is season-long, from 5/15 to 9/30, which encompasses the flowering period for this plant. Impacts to the population could result if excessive grazing removes a high percentage of the flower stalks annually, thereby inhibiting seed dissemination and reproduction. Light grazing within Harrington's penstemon habitat should result in few flower stalks being removed and would not affect the long-term reproductive capability of the population.

The grazing strategy indicates that livestock are rotated throughout the allotment to reduce the level of utilization in any one area and to provide some opportunity for grazing rest and recovery during the growing season. If livestock rotation is done in a timely manner, the level of grazing on penstemon flower stalks should remain low and reproduction of the species should be adequate to maintain the population. If livestock are allowed to linger in penstemon habitat throughout the flowering period, then grazing as proposed could lead to a long-term reduction in this population.

Bluehead sucker, Flannelmouth sucker, Roundtail chub:

These fish are all native to the Colorado River basin. These species are adapted to the historic natural conditions related to high sediment loads periodically carried by the Colorado River. These fish require periodic influxes of sediment to create and maintain important habitat components. This allotment allows for season long use, but calls for rotation of cattle across the allotment to provide some growing season rest and plant rest and recovery. Continued livestock grazing as proposed would have no negative impacts to these fish or their habitat.

Analysis on the Public Land Health Standard for T&E Species:

In 2004 the BLM Glenwood Springs Field Office evaluated the Spruce Gulch Allotment as part of the Rifle West Watershed Land Health Assessment. At that time, the Spruce Gulch allotment was determined to be meeting Standard 4 for T&E and other Special Status species. Several Harrington's penstemon sites were visited during the Land Health Assessment and excessive grazing of flower stalks was not observed. Continued livestock grazing as proposed would not be likely to prevent Standard 4 from being met.

WATER QUALITY, SURFACE AND GROUND (includes an analysis on Standard 5)

Affected Environment: The Spruce Gulch Allotment is located southwest of the City of Rifle, south of Interstate 70, and south of the Colorado River within the 4,554 acre Spruce Creek 6th field watershed. Flowing through the allotment are several unnamed ephemeral tributaries to Spruce Creek to the north which is directly tributary to the Colorado River.

The ephemeral drainages mentioned above are not currently listed on the State of Colorado's *Stream Classifications and Water Quality Standards* (CDPHE, Water Quality Control Commission, Regulation No. 37) list, *303(d) List of Water Quality Limited Segments Requiring TMDLS* (CDPHE, Water Quality Control Commission, Regulation No. 93) or the *Monitoring and Evaluation List* (CDPHE, Water Quality Control Commission, Regulation No. 94) as waterbodies suspected to have water quality problems. At this time, very limited current water quality data are available for area drainages.

Environmental Consequences/Mitigation: Grazing activities would result in soil compaction and displacement that increase the likelihood of erosional processes, especially on steep slopes and areas devoid of vegetation. Soil detachment and sediment transport are likely to occur during runoff events associated with spring snowmelt and short-duration high intensity thunderstorms. In addition, the number of livestock in the area would increase the amount of feces present in close proximity to nearby drainages. The introduction of livestock feces to water bodies often leads to water quality degradation by increasing fecal coliform bacteria levels which in turn can result in algal blooms and increases in water temperature. Due to the close proximity of the proposed activities to area drainages, there is potential that additional sediment associated with grazing practices as well as fecal coliform bacteria from livestock feces could reach the unnamed ephemeral tributaries to Spruce Creek. However, based on the number of cattle scheduled and the lack of major perennial drainages within the allotment, the potential for measureable water quality degradation associated with the proposed activities is minimal.

Analysis on the Public Land Health Standard 5 for Water Quality: In 2004 the BLM Glenwood Springs Field Office evaluated area drainages as part of the Rifle West Watershed Land Health Assessment. During that time, the limited data collected by BLM did not show any violations of the water quality standards established by the State of Colorado. Based on the number of cattle scheduled and the lack of major perennial drainages within the allotment, it is not likely that the proposed activities would prevent Standard 5 for Water Quality from being met.

WETLANDS and RIPARIAN ZONES (includes an analysis on Standard 2)

Affected Environment: Few wetlands and riparian zones exist within the Spruce Gulch Allotment other than small areas around several springs/seeps that occur on the allotment. These wetlands and riparian zones have not been inventoried or accessed. There are no recent documented field observations or monitoring on the allotment.

Environmental Consequences/Mitigation: The Spruce Gulch allotment would be authorized for grazing of 14 cattle for approximately 4.5 months (from May 15 to Sept. 30). According to the background information provided, livestock will be rotated throughout the allotment to allow for periods of growing season rest. Livestock grazing for an extended period in wetlands and riparian zones can result in severe utilization and trampling of the riparian vegetation. This can cause a decline in condition (i.e., a reduction in coverage and a decrease in species composition) of the riparian zone. However, given the low animal numbers that would be authorized and the grazing strategy that would be practiced, it is assumed there would be ample grazing rest and recovery time for riparian plant species. Renewal of the grazing permit is not expected to cause adverse impacts to riparian zones. The condition of riparian areas would be maintained or improved. There would be no cumulative impacts.

Analysis on the Public Land Health Standard for Riparian Systems: The proposed action would not result in failure to achieve this standard and should maintain and/or improve land health conditions for riparian systems.

NON-CRITICAL ELEMENTS

SOILS (includes an analysis on Standard 1)

Affected Environment: According to the *Soil Survey of Rifle Area, Colorado: Parts of Garfield and Mesa Counties* (USDA 1985), the Spruce Gulch Allotment contains eight different soil map units that can be identified by the numerical code assigned by the soil survey (*e.g. Cochetopa loam=17*). These soil map units are scattered throughout the allotment and have been identified as having moderate to severe erosion hazards. In addition, some areas within the allotment are mapped as CSU 4 (Controlled Surface Use) for erosive soils on slopes greater than 30% and NSO 15 (No Surface Occupancy) for slopes greater than 50% regardless of soil type. Following is a brief description of the eight soil map units found within the Spruce Gulch Allotment.

- Bucklon-Inchau loams (12) These soils occur on ridges and mountainsides at elevations ranging from 7,000 to 9,500 feet and on slopes of 25 to 50 percent. About 55 percent of this soil map unit is Bucklon soil and 35 percent Inchau soil. The remaining 10 percent of the soil map unit are made up of varying amounts of Cochetopa, Cimarron, and Jerry soils. The Bucklon soil is found on steep, convex areas while the Inchau soil is found on more concave areas. The Bucklon soil is shallow, well drained and has medium surface runoff with severe erosion hazard. The Inchau soil is moderately deep, well drained and has medium surface runoff with severe erosion hazard. Primary uses for these soils include wildlife habitat and limited grazing.
- Cochetopa loam (17) This deep, well drained soil is found on mountainsides and alluvial fans at elevations ranging from 7,000 to 9,500 feet and on slopes of 9 to 50 percent. Parent material for this soil is basaltic alluvium. Surface runoff for this soil

is slow and erosion hazard is severe. Primary uses for this soil include grazing and wildlife habitat.

• Ildefonso stony loam (34) - This deep, well drained, hilly soil is found on mesas, sides of valleys, and alluvial fans at elevations from 5,000 to 6,500 feet and on slopes of 25 to 45 percent. This soil is derived primarily from basalt and may contain a small amount of eolian material at the top of the unit. Surface runoff for this soil is medium and erosion hazard is severe. Primary uses for this soil include grazing and wildlife habitat.

Morval-Tridell complex (45) – This soil map unit is found on alluvial fans and the sides of mesas at elevations ranging from 6,500 to 8,000 feet and on slopes of 6 to 25 percent. The Morval soil makes up about 55 percent of the unit and is found on lower slopes while the Tridell soil makes up about 30 percent of the unit and is found on the sides of mesas. Both soils are deep, well drained and have medium surface runoff and moderate erosion hazard. The primary uses for this soil map unit include grazing and wildlife habitat.

Potts-Ildefonso complex (58) – This complex is found on mesas, alluvial fans, and the sides of valleys at elevations ranging from 5,000 to 6,500 feet and on slopes of 12 to 25 percent. Parent material for this soil complex consists of sandstone, shale, and basalt. This soil complex is deep, well drained, and has medium surface runoff and moderate erosion hazard. Uses for this soil complex include limited grazing and wildlife habitat.

Potts-Ildefonso complex (59) – This complex occurs on alluvial fans and the sides of valleys at elevations ranging from 5,000 to 6,500 feet and on slopes of 25 to 45 percent. Parent material for this soil complex consists of sandstone, shale, and basalt. Approximately 60 percent of this complex is the Potts soil while about 30 percent is the Ildefonso soil. Both soils are deep, well drained, and have medium surface runoff and severe erosion hazard. Uses for this soil complex include limited grazing and wildlife habitat.

- Torriorthents-Rock outcrop complex, steep (67) This complex consists of stony soils and exposed outcrops of Mesa Verde sandstone and Wasatch shale that occur on slopes of 15 to 70 percent. Approximately 60 percent of this complex is Torriorthents and 25 percent is Rock outcrop. The Torriorthents are clayey to loamy and contain gravel, cobbles, and stones; many of which are basaltic in origin. They are found on mountainsides below the Rock outcrop. Erosion hazard for this complex varies from moderate to severe. Primary uses for this complex include limited grazing, wildlife habitat, and recreation.
- Villa Grove-Zoltay loams (71) These soils occur on mountainsides and alluvial fans at elevations ranging from 7,500 to 7,600 feet and on slopes of 15 to 30 percent. About 50 percent of this soil map unit is the Villa Grove soil and 40 percent the Zoltay soil. The remaining 10 percent of this soil map unit consists of varying amounts of Vale, Potts, and Morval soils. The Villa Grove soil is deep, well drained and has slow surface runoff with slight erosion hazard. The Zoltay soil is deep, well drained and has medium surface runoff with moderate erosion hazard. Primary uses for these soils include grazing, wildlife habitat, and irrigated pasture.

Environmental Consequences/Mitigation: As mentioned above, areas within the Spruce Gulch Allotment occur on soils with severe erosion hazards and on slopes greater than 30% (17°). Grazing activities would result in soil compaction and displacement that increase the likelihood of erosional processes, especially on steep slopes and areas devoid of vegetation. Soil detachment and sediment transport are likely to occur during runoff events associated with spring snowmelt and short-duration high intensity thunderstorms. Due to the close proximity of the proposed activities to area drainages, there is potential that additional sediment associated with grazing practices could reach area drainages. However, based on the number of cattle scheduled and the distance from major perennial drainages, the potential for negative soil impacts and sediment transport are minimal.

Analysis on the Public Land Health Standard 1 for Upland Soils: In 2004 the BLM Glenwood Springs Field Office evaluated the Spruce Gulch Allotment as part of the Rifle West Watershed Land Health Assessment. At that time, staff rated 1,715 acres of the Spruce Gulch Allotment as achieving or moving towards achieving Standard 1 for Upland Soils. Based on the number of cattle scheduled and the conditions in 2004, it is not likely that the proposed activities would prevent Standard 1 for Upland Soils from being met.

VEGETATION (includes an analysis on Standard 3)

Affected Environment:

The lower elevations of the Spruce Gulch allotment are comprised of pinyon-juniper woodlands; the middle elevations are dominated by oakbrush, sagebrush, and mixed mountain shrublands. The highest elevations on the southern end of the allotment support an aspen/mixed coniferous forest.

Environmental Consequences/Mitigation:

When grazing in the late spring and summer, cattle focus on annual and perennial grasses and forbs that are green and high in protein at this time. Healthy herbaceous vegetation is maintained by providing periodic rest from grazing during critical growth periods or adequate recovery and regrowth periods following grazing.

The reauthorization of grazing as proposed would continue to allow season-long grazing (5/15 to 9/30) on the Spruce Gulch allotment. The grazing strategy indicates that livestock are rotated throughout the allotment to reduce the level of utilization in any one area and to provide some opportunity for grazing rest and recovery during the growing season. If livestock rotation is done in a timely manner, herbaceous plants should have adequate rest periods to maintain plant health. If livestock are allowed to linger in any portion of the allotment for an extended period of time, the health of palatable plant species may decline and the cover and composition of unpalatable species may increase.

Analysis on the Public Land Health Standard for Plant and Animal Communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial):

In 2004 the BLM Glenwood Springs Field Office evaluated the Spruce Gulch Allotment as part of the Rifle West Watershed Land Health Assessment. At that time, Standard 3

for plant communities was being met; however, problems were noted with the health of the vegetative communities. Sagebrush was dominated by old, decadent sagebrush with poor recruitment of younger age classes. Pinyon-juniper encroachment into sagebrush communities was also widespread throughout the allotment. Existing livestock grazing was not considered a significant contributing factor to the current land health conditions.

The proposed action allows for season-long grazing. However, the grazing strategy calls for the rotation of cattle throughout the season to provide some growing season rest. If rotation is done in a timely manner, then continuation of livestock grazing should not result in a failure to meet Standard 3 for plant communities.

WILDLIFE AQUATIC (includes an analysis on Standard 3)

Affected Environment:

The Spruce Gulch Common allotment contains a small portion of one perennial stream, Cache Creek, located on approximately 0.2 miles of the private land portion of the allotment. This stream also parallels the allotments western boundary. Cache Creek contains a pure population of greenback cutthroat trout a federally threatened species addressed in the TES Section above. Otherwise, the allotment is drained via ephemeral washes the largest being Spruce Gulch. The Colorado River is located approximately 0.6 miles to the north and contains a variety of fish. In addition to those species addressed in the TES section above, the river contains speckled dace, rainbow trout, brown trout, mountain whitefish, carp, white suckers, longnose suckers, and mottled sculpin. Both waters contain abundant aquatic insects.

Environmental Consequences/Mitigation:

The proposed action is to renew the term grazing permit. Continued grazing activities would result in some soil compaction and displacement and increase the likelihood of erosional processes, especially on steep slopes, areas devoid of vegetation, and at livestock concentration areas such as stock waters, salting sites, and in drainage bottoms. Soil detachment and sediment transport are likely to occur during runoff events associated with spring snowmelt and short-duration high intensity thunderstorms. Due to the close proximity of the proposed grazing to area drainages and perennial Cache Creek, there is potential that additional sediment associated with grazing practices could reach this stream and the nearby Colorado River.

Sediment can impact trout, mountain whitefish, and sculpin species by silting in important spawning substrates and in the event eggs are present, by smothering eggs which leads to reduced productivity. Excessive sediment can also fill in important pool habitats reducing their depth and usability during critical summer and winter periods when they are needed for thermal refuge and survival. Aquatic insect productivity can be impaired as sediment covers clean gravels and cobbles and fills in the interstitial spaces needed by these insects. This can reduce stream productivity and food sources for fish and terrestrial bird and bat species. Suckers, carp, and dace are well adapted to sediments and any increases should have minimal negative impacts. The reauthorization of grazing as proposed would continue to allow season long grazing (5-15 to 9-30). The grazing

strategy calls for the rotation of cattle within the allotment to reduce use in any one area for too long. If this is done in a timely manner than the allotment should receive some growing season rest and plant rest and recovery periods. If not, then grazing as proposed could impact these streams.

Analysis on the Public Land Health Standard for Plant and Animal Communities (partial, see also Vegetation and Wildlife, Terrestrial):

A formal Land Health Assessment was completed for the area in 2004. At that time the majority of the streams were meeting Standard 3 for aquatic wildlife. The proposed action allows for season long grazing. However, the grazing strategy calls for the rotation of cattle throughout the season to provide some growing season rest. If this is done in a timely manner than impacts to resident fish should be reduced.

WILDLIFE TERRESTRIAL (includes an analysis on Standard 3)

Affected Environment:

The allotment provides important habitat for a variety of obligate species of birds, and are particularly important as food and cover for wintering big game. Pinyon-juniper woodlands provide important foraging and nesting habitat for some raptor species and many migratory song birds, and provide security, foraging, and thermal cover for a variety of small game, big game, and nongame wildlife. Mixed mountain shrub and oak habitats are important to turkey, black bear, and lion among others.

Terrestrial habitats have been altered by roads, fences, public recreation use, residential and commercial development, vegetative treatments and livestock and wild ungulate grazing. These human uses contribute to degradation of habitat quality, fragmentation of habitat for several species and the expansion of areas supporting noxious and exotic vegetative species.

Species of High Public Interest. Mule deer and elk usually occupy the area yearround however the sagebrush-dominant ridges and south-facing slopes are important big game winter habitat. BLM lands within this allotment provide a large portion of the less-developed winter and summer range available to deer and elk. The allotment overlaps with CDOW mapped elk winter concentration area, and elk summer range including elk production area. The allotment also overlaps with CDOW mapped mule deer severe winter and winter concentration area, along with summer range. Winter concentration areas are that part of the winter range where densities are at least 200% greater than the surrounding winter range density during the same period used to define winter range in the average five winters out of ten. Severe winter range is considered that part of the overall range where 90% of the individuals are located when the annual snowpack is at its maximum and/or temperatures are at a minimum in the two worst winters out of ten.

Public surveys, land management agency input, and HPP committee participation all indicate a general agreement that the elk herd is at or near desirable and sustainable levels. The current population size of approximately 11,500 animals is just above the objective of 10,500 animals for DAU E-14 (game management units 41. 42, 52, 411. 421. 521) (http://wildlife.state.co.us/NR/rdonlyres/3B3FB96B-A5DA-4835-BD8D-

C71723E66379/0/E14DAUPlanFinal.pdf). Public surveys, land management agency input, and

HPP committee participation all indicate a general agreement that the deer herd is at or near desirable and sustainable levels. The current population size of approximately 30,500 animals is just above the DAU D-12 objective (GMUs: 41, 42, 421). of 29,500 animals that was set through the DAU planning process (http://wildlife.state.co.us/NR/rdonlyres/057CB0C3-C4E9-46E2-8570-996BF0D5FCE7/0/D12DAUPlanFinal.pdf).

Environmental Consequences/Mitigation:

It is unlikely that the proposed action would have any long-term negative impacts to terrestrial wildlife or their habitat. Under the proposed action, the allotment would be grazed intensively in the spring for short durations and direct competition with wildlife for forage would occur. Livestock would be moved through pastures so no area would receive season long grazing. The proposed action would not be expected to degrade wildlife habitat and would still provide for the forage and cover needs of resident wildlife.

Species of High Public Interest. The magnitude of competitive interactions between big game and livestock is poorly understood. Livestock and wild ungulate carrying capacities should be evaluated holistically and be used to guide stocking rate decisions and wild ungulate population objectives. Since these allotments are part of big game winter ranges, the lack of late-season grazing provides residual vegetation that is necessary for wintering big game. Regrowth areas previously used by cattle in the spring may even be favored because of the resultant increase in forage palatability.

Qualitatively viewing the big game population trends and objectives in relationship to the consistent level of livestock AUMs, adequate livestock management and sufficient range monitoring, it can be assumed that the current stocking rates will continue to be compatible with CDOW big game objectives.

<u>Analysis on the Public Land Health Standard 3 for Plant and Animal Communities</u> (partial, see also Vegetation and Wildlife, Aquatic): The proposed action allows for season-long grazing. However, as long as rotation is done each year in a timely manner, then continuation of livestock grazing should not result in a failure to meet Standard 3 for terrestrial wildlife.

<u>OTHER NON-CRITICAL ELEMENTS</u>: For the following elements, those brought forward for analysis will be formatted as shown above.

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Travel/Access		X	
Cadastral Survey	Х		
Fire/Fuels Management		Х	
Forest Management	Х		
Geology and Minerals	Х		
Law Enforcement	Х		
Paleontology	Х		
Noise	Х		

Range Management		X
Realty Authorizations	X	
Recreation	X	
Socio-Economics	X	
Transportation	X	
Visual Resources	X	

MITIGATION:

New improvements or maintenance of existing range improvements may require cultural resource inventories, monitoring, and/or data recovery. This allotment may also contain undiscovered historic properties and/or resources protected under the National Historic Preservation Act (NHPA), American Indian Religious Freedom Act, Native American Graves Protection and Repatriation Act, E.O. 13007, or other statutes and executive orders. The BLM may require modification to development proposals to protect such properties, or disapprove any activity that is likely to result in damage to historic properties or areas of Native American concern.

CUMULATIVE IMPACTS SUMMARY:

PERSONS/AGENCIES CONSULTED:

Grazing Permittee Southern Ute Tribe, Chairman Northern Ute Tribe, Chairman Ute Mtn. Ute Tribe, Chairman

INTERDISCIPLINARY REVIEW:

Name	Title	Area of Responsibility
Isaac Pittman	Rangeland Management Specialist	Range, NEPA Lead
Mike Kinser	Rangeland Management Specialist	Riparian Zones
Jeff O'Connell	Hydrologist/Geologist	Soil, Air, Water, Geology
Kay Hopkins	Outdoor Recreation Planner	Wilderness, VRM, WSR
Carla DeYoung	Ecologist	ACEC, T/E/S Plants,
		Vegetation, Standards
Cheryl Harrison	Archaeologist	Cultural & Native
		American Concerns
Tom Fresques	Fisheries Biologist	Wildlife Aquatic, T/E/S
		(Fish)
Brian Hopkins	Wildlife Biologist	Wildlife Terrestrial, T/E/S
		(Terrestrial Wildlife)
Dereck Wilson	Range Management Specialist	Invasive, Non-native
		Species

SIGNATURE OF PREPARER:

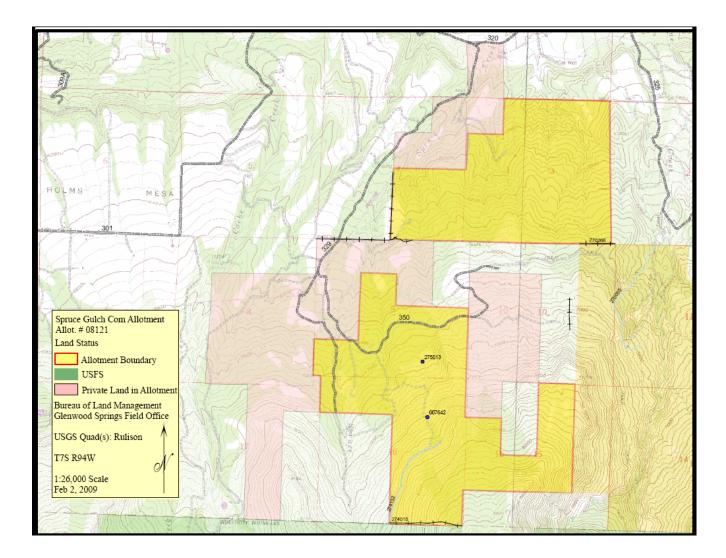
4/13/2009

DATE SIGNED:

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ATTACHMENTS: Allotment Map

<u>APPENDIX A:</u> Biological Assessment for the Glenwood Springs Field Office Regarding Grazing Permit Renewals and Canada Lynx – FY 2009



APPENDIX A

Biological Assessment for the Glenwood Springs Field Office Regarding Grazing Permit Renewals and Canada Lynx – FY 2009

Garfield, Routt, Eagle and Pitkin Counties, Colorado

February 12, 2009

Submitted by:

Bureau of Land Management Glenwood Springs Field Office Glenwood Springs, CO

Prepared by:

Desa Ausmus, Wildlife Biologist Bureau of Land Management Little Snake Field Office Craig, CO

I. Introduction

The Canada lynx was listed as a threatened species under the Endangered Species Act (Federal Register, Volume 65, No. 58, March 24, 2000) effective April 24, 2000. In the proposed rule, the U.S. Fish and Wildlife Service concluded that the population in the United States is threatened by human alteration of forests, low numbers as a result of past overexploitation, expansion of the range of competitors and elevated levels of human access into lynx habitat. The final rule designating critical habitat was published in the Federal Register on November 9, 2006. There is no critical habitat designated in Colorado.

Threatened and endangered species are managed under the authority of the Endangered Species Act of 1973 (PL 93-205, as amended). The Endangered Species Act requires Federal agencies to ensure that all actions which they authorize, fund, or carry out are not likely to jeopardize the continued existence of any endangered or threatened species, or result in the destruction or adverse modification of their critical habitat. This Biological Assessment regarding the renewal of 12 livestock grazing permits was prepared in accordance with the above provisions.

II. Project Description and Location

The proposed action consists of the renewal of term grazing permits on twelve allotments that either contain mapped lynx habitat, are located within a mapped landscape linkage or both. Each permit will be issued for a 10-year period, unless the base property is leased for less, but for purposes of the BA, we are assuming 10 years of grazing by the current applicant, or another applicant, in the case of a transfer. These allotments are all located within the Glenwood Springs Field Office (GSFO). Table 1 identifies the twelve allotments and lists allotment name, allotment type, acres of public land and predominant habitat type.

All 12 allotments were included in the Glenwood Springs Field Office's programmatic biological assessment. Site-specific consultation has not been completed for four of the allotments. Eight of the allotments have already had site-specific consultations and these permits are being reissued for another 10 year period. Each consultation made a "May Affect, Not Likely to Adversely Affect" determination and a concurrence letter was received from FWS. Additional data, supporting this determination for these eight allotments, is included in this BA.

ALLOTMENT NAME	LIVESTOCK TYPE	ACRES OF PUBLIC (BLM) LAND	PREDOMINANT HABITAT TYPE
Antelope Creek	cattle	3,820	pinyon-juniper/ sagebrush/aspen/ lodgepole
Cantley Homestead	cattle	331	aspen/oakbrush/fir
Jackson	cattle	322	oakbrush/spruce- fir/aspen
W. Hardscrabble Common	cattle	16,300	oakbrush/sage/aspen/ conifer
Spruce Gulch Common	cattle	1,715	oakbrush/aspen/Douglas- fir/ ponderosa pine
Red Hill Common	cattle	11,936	pinyon-juniper/sage
Porcupine Common	cattle	1,927	oak brush /juniper /moutain shrub
E. Hardscrabble	cattle	7,614	pinyon-juniper /mountain shrub
Salt Creek Forest	cattle	780	pinyon-juniper /mountain shrub/ sage
E. Divide Common	cattle	13,777	oakbrush/aspen/spruce- fir
N. Thompson Creek Common	cattle	3,415	oakbrush /pinyon-juniper
Harris Gulch	sheep	2,238	conifer/aspen/oakbrush

Table 1. Allotment Type, Size and Dominant Habitat Type in Lynx Habitat

Total = **12**

Total Acres = 64,175

III. Consultation History

To date, the GSFO has completed 8 project level consultations regarding livestock grazing and Canada lynx. These were all specific to individual permits up for renewal for a given year for permits/leases on grazing allotments that contained mapped lynx habitat. Each consultation made a "May Affect, Not Likely to Adversely Affect" determination and a concurrence letter was received from FWS.

In addition, programmatic consultation (ES/GJ-6-CO-03-F-013) for Canada lynx was completed on the entire grazing program as administered by the GSFO. A "May Affect, Not Likely to Adversely Affect" determination was made and concurrence was obtained via a Biological Opinion from the FWS. A Biological Opinion was required at the time due to the Kessler Court Decision. Since that time, that decision has been remanded and a BO is no longer required for NLAA determinations. Copies of all of these Biological Assessments, concurrence letters, and the Biological Opinion are available for review at the Glenwood Springs Field Office. This Biological Assessment is for Canada lynx, and is at the site-specific project level and tiers to the programmatic grazing consultation noted above.

IV. Species Considered & Species Evaluated

Table 2 below, contains a list of Threatened, Endangered, Proposed, and Candidate species located or with potential to be located on lands administered by the Bureau of Land Management's Glenwood Springs Field Office. Although all of the below listed species are found on the GSFO species list, the only species addressed under this consultation is Canada lynx. Other species would be consulted on in the event of any "May Effect" determination through NEPA analysis.

Common Name	Scientific Name	Federal Status
Bony-tailed chub	Gila elegans	Endangered
Colorado pikeminnow	Ptychocheilus lucius	Endangered
Humpback chub	Gila cypha	Endangered
Razorback sucker	Xyrauchen texanus	Endangered
Black-footed ferret	Mustela nigripes	Endangered
Uncompangre fritillary	Boloria acrocnema	Endangered
butterfly		
Canada lynx	Lynx candensis	Threatened
Ute ladies'-tresses orchid	Spiranthes diluvialis	Threatened
Uinta Basin hookless cactus	Sclerocactus glaucus	Threatened
Mexican spotted owl	Strix occidentalis lucida	Threatened
Parachute penstemon	Penstemon debilis	Candidate
DeBeque phacelia	Phacelia scopulina var. submutica	Candidate
Yellow-billed cuckoo	Coccyzus americanus	Candidate

 Table 2. List of Threatened, Endangered and Candidate Species

V. Description of the Species (Canada Lynx) and their Habitat

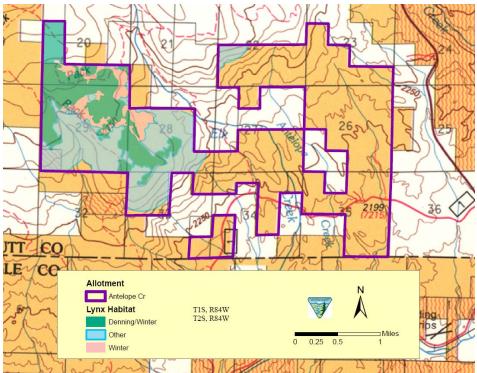
The general summary of lynx habitat was discussed in the Programmatic Consultation ES/GJ-6-CO-03-F-013, which this BA is tiered to. Below is site specific information on local habitat conditions within the 12 livestock grazing allotments being addressed in this BA. Information includes proposed management, allotment habitat characteristics, existing range data, and data collection associated with Land Health Assessments (LHA) regarding Standard 4 for lynx that was conducted on the allotments.

Allotments without site specific consultations

1. Antelope Creek

Background

The Antelope Creek Allotment contains 3820 acres of BLM managed lands. Lynx habitat is mapped in the north-west portion of the allotment and is comprised of 559 acres of winter/ denning habitat, 162 acres of winter foraging habitat and 736 acres of other habitat. Lynx habitat in this allotment is not currently located within an LAU, but lies within the Egeria Landscape Linkage. Vegetation within lynx habitat is comprised primarily of lodgepole pine, ponderosa pine, spruce and aspen.



Map displaying lynx habitat on the Antelope Creek allotment

The Antelope Creek Allotment is located in the Colorado River - Burns to State Bridge watershed. A formal LHA was completed for this landscape in 2006/2007. All of the sites visited in lynx habitat were found to be meeting Standard 3 for healthy plant and animal communities. All areas containing lynx habitat were found to be in good condition, providing healthy and productive habitat for lynx and their prey. Based on the overall condition of upland and riparian habitats located on public lands, Standard 4 for Canada lynx was being met within the Colorado River – Burns to State Bridge watershed. Movement is not being impeded and vegetation capable of providing alternative prey for lynx is abundant.

Habitat assessments specific to Canada lynx were completed for this allotment in 2008. Sites in both winter foraging and other habitat were evaluated. Overall, the allotment was in good condition. Utilization ranged from none to slight, with only wild ungulate sign noted. Abundant grasses and forbs were present with good diversity and productivity in aspen stands. Areas dominated by lodgepole pine forest had a sparse, but appropriate understory. The Antelope

Creek Allotment was meeting Standard 4 and current grazing management does not appear to be impacting the usability of lynx habitat.



Photos of lynx habitat on the Antelope Creek Allotment

The main riparian areas within this allotment are Antelope Creek, Elk Creek, Stifel Creek and Tepee Creek. A riparian condition assessment (PFC) was done in 2006 and all sections of the above creeks within the Antelope Creek Allotment were rated as Proper Functioning. Riparian vegetation was in good condition and was providing suitable cover for wildlife movement.

Proposed Action

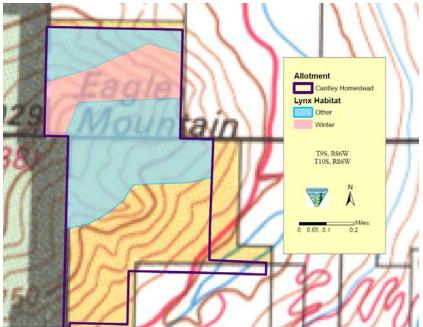
Public Land Acres	Livestock Kind & No.	Period of use	% Public Land	AUMs
3820	107 Cattle	05/01 - 07/31	100	324

Grazing in this allotment is permitted from the beginning of May through the end of July. Cattle are moved through the allotment during the three month grazing period, ensuring that no area receives season long grazing. This grazing system allows for sufficient growing season rest and adequate plant recovery periods. Seed production, dissemination, and seedling establishment are not hindered from livestock grazing.

2. Cantley Homestead

Background

The Cantely Homestead Allotment contains 331 acres of BLM managed lands. Lynx habitat is comprised of 55 acres of winter foraging habitat and 145 acres of other habitat. Lynx habitat in this allotment is not currently located within an LAU, but lies adjacent to the White River National Forest's Snowmass LAU. Vegetation within lynx habitat is comprised primarily of aspen, spruce/fir and oakbrush.



Map displaying lynx habitat on the Cantley Homestead Allotment.

No formal LHA has been completed for this allotment. The allotment was visited in 2008 to assess lynx habitat. Lynx habitat within this allotment is very steep and probably receives little, if any, grazing from domestic livestock. Wild ungulate sign was noted just below mapped winter habitat. Although 145 acres of other lynx habitat is mapped within this allotment, most of the vegetation is oakbrush and is not considered to have high value to lynx or their prey species.

Proposed Action

Public Land Acres	Livestock Kind & No.	Period of use	% Public Land	AUMs
331	50 cattle	6/21 - 6/30	100	17

Livestock grazing is permitted on the Cantley Homestead Allotment for 10 days each June. Cattle are basically trailed through the lower elevations of the allotment on their way to the White River National Forest. This allotment receives adequate growing season rest which allows for plant rest and recovery. Seed production, dissemination, and seedling establishment is not being hindered. It is unlikely that grazing is impacting lynx habitat on the Cantley Homestead Allotment.

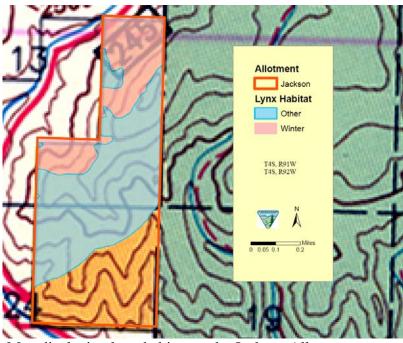


Photos of lynx habitat on the Cantley Homestead Allotment

3. Jackson

Background

The Jackson Allotment contains 322 acres of BLM managed lands. Lynx habitat is mapped in the northern two thirds of the allotment and is comprised of 70 acres of winter habitat and 159 acres of other habitat. Lynx habitat in the allotment is not within a LAU, but is adjacent to the White River National Forest BarHL LAU. Vegetation in mapped lynx habitat is comprised of aspen/spruce-fir and oakbrush.



Map displaying lynx habitat on the Jackson Allotment.



Photo of lynx habitat on the Jackson allotment

A formal LHA was completed for this allotment in 2007/2008. Due to the steep topography, the allotment was assessed from the base of the hill. No evidence of livestock grazing or any land health issues were noted. Since much of the lynx habitat within this allotment is very steep, it probably receives little, if any, grazing from domestic livestock. Although 145 acres of other lynx habitat is mapped within this allotment, most of the vegetation is oakbrush and is not considered to have high value to lynx or their prey species.

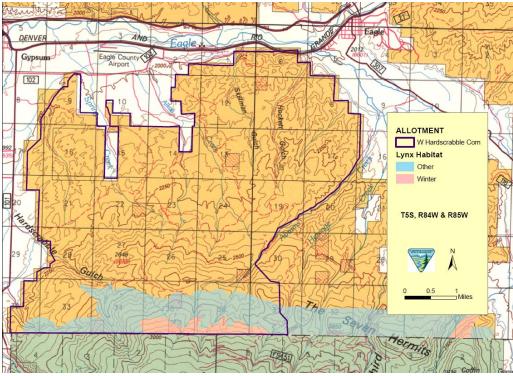
Proposed Action

Public Land Acres	Livestock Kind & No.	Period of use	% Public Land	AUMs
322	20 Cattle	06/16 - 07/31	100	30

Grazing is permitted on the allotment for about six weeks during the summer. Only the flatter portion of the allotment, at the top of the slope is likely utilized by livestock. The allotment is being managed within BLM's guidelines and receives adequate rest for plant recovery.

4. W. Hardscrabble Common

The W. Hardscrabble Common Allotment contains 16,300 acres of BLM managed lands. Lynx habitat is mapped in the extreme southern portion of the allotment and consists of 325 acres of winter habitat and 1765 acres of other habitat. Lynx habitat in the allotment is not within a LAU, but is adjacent to the White River National Forest's Battlement LAU. Vegetation in mapped lynx habitat includes lodgepole pine, aspen stands, sagebrush and oakbrush.



Map displaying lynx habitat on the W. Hardscrabble Allotment.

The W. Hardscrabble Common Allotment is located in the Eagle River South watershed. A formal LHA was completed for this landscape in 2002/2003. The allotment as a whole was considered to be meeting Standard 3 for healthy plant and animal communities, with some problem areas. The main problems were found on the lower elevation sagebrush sites. On these sites, sagebrush was in poor condition with pinyon-juniper encroachment. Many sites had low vigor and productivity, possible due to drought conditions that year. Higher elevation areas containing lynx habitat were found to be in good condition, providing healthy and productive habitat for lynx and their prey. The allotment was determined to be meeting Standard 4 for Canada lynx.

Habitat assessments specific to Canada lynx were completed for this allotment in 2003. Sites in both winter foraging and other habitat were evaluated. Overall, lynx habitat in the allotment was in good condition. Grazing in areas dominated by aspen and lodgepole pine was low. Some weeds, such as Canada thistle, musk thistle and houndstongue were noted. The W. Hardscrabble Common Allotment was meeting Standard 4 and current grazing management does not appear to be impacting the usability of lynx habitat.



Photo of lynx habitat on the W. Hardscrabble allotment

Public Land Acres	Operator number	Livestock Kind & No.	Period of use	% Public Land	AUMs
16,300	1	395 cattle	5/01 - 6/30	100	597
		10 cattle	10/16 - 10/31	100	5
	2	128 cattle	5/01 - 6/30	100	194
		10 cattle	10/16 - 10/31	100	5
	3	100 cattle	5/01 - 6/30	100	151
		10 cattle	10/16 - 10/31	100	5

Proposed Action

The West Hardscrabble Allotment is under an Allotment Management Plan (AMP). The AMP specifies a grazing system in which cattle are rotated amongst five different "areas" of the allotment during the spring use period. Period of use in each grazing area varies from 10 to 15 days. The AMP acknowledged that pastures could not be designated due to the lack of fencing and water availability. Given the lack of pasture fencing and lack of water in some areas of the allotment, cattle are actually rotated amongst three to four areas of the allotment. Lower elevation areas of the allotment are used first then cattle are moved to higher elevation areas prior to moving onto the adjacent National Forest allotment. Period of use varies from two to three weeks in each area of the allotment; however, due to lack of pasture fencing there is always some livestock drift between the grazing areas.

Grazing in this allotment is permitted from the beginning of May through the end of June. Grazing also occurs for about two weeks in the fall. Cattle are moved through the allotment during both grazing periods, ensuring that no area receives season long grazing. This grazing system allows for sufficient growing season rest and adequate plant recovery periods. Seed production, dissemination, and seedling establishment are not hindered from livestock grazing.

Allotments with completed site-specific consultations

Allotment specific consultations have been completed for the following eight allotments. One allotment, Harris Gulch, is proposed to have a change in livestock class. The other seven allotments will have no change or very minor changes to the grazing permits. The proposed action is to re-issue the grazing permit for another 10 years. Since the grazing schedules have already been consulted on, they will not be re-stated in this BA. New information collected since the initial consultation, supporting the NLAA determination is presented below.

1. Harris Gulch

A site specific consultation was completed for grazing within the Harris Gulch Allotment in 2008. The permittee would like to change the class of livestock from cattle to sheep.

A formal LHA was completed for this allotment. Four sites throughout the allotment were visited, three outside of lynx habitat and one in lynx habitat. Overall, the allotment was in good condition and was meeting the standard for healthy and productive plant and wildlife communities. One site visited in the allotment did not meet standard 3 for healthy vegetative communities due to weeds. This was a small livestock concentration area which represents less that 10% of the allotment. The most recent range monitoring was completed in the summer of 2005, outside of lynx habitat. This allotment is meeting Standard 4 and livestock grazing is not degrading lynx habitat.

Proposed Action

Public Land Acres	Livestock Kind & No.	Period of use	% Public Land	AUMs
3316 acres	78 cattle	6/15 to 8/31	90%	180

Previous Grazing Schedule:

Proposed Grazing Schedule:

Public Land Acres	Livestock Kind & No.	Period of use	% Public Land	AUMs
3316 acres	800 sheep	06/15 - 07/15	90%	147
	800 sheep	10/19 - 10/25	90%	33

The Harris Gulch Allotment would be grazed for four weeks in the early summer and again in the fall for six days. This would provide adequate growing season rest which allows for plant rest and recovery. Seed production, dissemination, and seedling establishment would not be hindered. The allotment is currently in good condition, and the proposed changes to the permit are not expected to change the condition of lynx habitat on the allotment.

2. E. Hardscrabble

A site specific consultation was completed for grazing within the E. Hardscrabble Allotment in July of 2000. Since this time, a formal land health assessment (2002/2003) and a lynx habitat evaluation (2000) have been completed.

The E. Hardscrabble Allotment is located in the Eagle River South watershed. A formal LHA was completed for this watershed in 2002/2003. Some sites within the allotment were found to not be meeting Standard 3 for health plant and animal communities. The main problems were found on the lower elevation sagebrush sites. On these sites, sagebrush was in poor condition with pinyon-juniper encroachment. Many sites had low vigor and productivity, possible due to drought conditions that year. Weeds were also found on several of these sites. Vegetative communities in upper elevations were in much better condition. Aspen and conifer stands had better vigor and productivity than lower elevation sites. All sites within mapped lynx habitat were found to be meeting Standard 3 and provided suitable habitat for lynx and their prey.

Habitat assessments specific to Canada lynx were completed for this allotment in 2000, after the initial consultation was complete. Nine sites were visited within the allotment. Overall, lynx habitat in the allotment was in good condition. Utilization ranged from none to slight and livestock sign was noted at five of the sites. Milk thistle and hounds tongue were found at one site. The E. Hardscrabble Common Allotment was meeting Standard 4 and current grazing management does not appear to be impacting the usability of lynx habitat.

3. Salt Creek Forest

A site specific consultation was completed for grazing within the Salt Creek Forest Allotment in July of 2000. Since this time, a formal LHA and a lynx habitat evaluation have been completed.

The Salt Creek Forest Allotment is located in the Eagle River South watershed. A formal LHA was completed for this watershed in 2002/2003. The allotment was found to be meeting Standard 3 for healthy plant and animal communities. The allotment is in good condition and provides productive habitat for Canada lynx. The Salt Creek Forest Allotment was meeting Standard 4 and current grazing management does not appear to be impacting the usability of lynx habitat.

Habitat assessments specific to Canada lynx were completed for this allotment in 2000, after the initial consultation was complete. Two sites were visited within lynx habitat. Utilization was none to slight with no evidence of livestock use. The vegetative community was in good condition and aspen regeneration was abundant at one site. At least 4 different age classes of aspen were noted with many small saplings present. Understory grasses, shrubs, and forbs were diverse and abundant and in good condition. The allotment was meeting Standard 4.

4. Porcupine

A site specific consultation was completed for grazing within the Porcupine Allotment in July of 2000. Since this time, a formal LHA and a lynx habitat evaluation have been completed.

The Porcupine Allotment is located in the Rifle-West watershed. A formal LHA was completed for this watershed in 2004/2005. One site within lynx habitat was visited. Mapped habitat in the allotment is located on steep side hills or within steep drainages that are not being accessed by livestock. Lynx habitat in the allotment was in good condition. Understory vegetation was in good condition and aspen and conifer trees were healthy. Based on the overall condition of habitat, Standard 4 for Canada lynx was being met.

Habitat assessments specific to Canada lynx were completed for this allotment in 2000, after the initial consultation was complete. One site was assessed but a larger portion was hiked through. This allotment is mostly mixed mountain shrub with some Doug-fir and aspen in the southeast corner. Evidence of livestock use was apparent. Utilization was light except for along the main cattle trail through the heavy oakbrush where in small openings use was moderate to heavy. Understory grasses were productive and vigorous. Canada thistle and broader areas of houndstongue were noted. Livestock sign was far less evident farther up the steep slope to the east. This is where the best lynx habitat was located with a denser stand of Doug-fir and a couple of aspen stringers. Several small seeps and springs with cottontails were noted. Lynx habitat within the Porcupine Allotment is in good condition and the allotment was meeting Standard 4.

5. North Thompson Creek

A site specific consultation was completed for grazing within the North Thompson Creek Allotment in July of 2000. Since this time a lynx habitat evaluation (2001) has been completed. No formal LHA has been completed for this allotment.

Lynx habitat in this allotment is located on a steep northeast facing slope. The habitat was diverse with good vegetative structure and diversity. Vegetation was healthy with good production. Aspen at the site were healthy with at least 3 different age classes noted. Some recruitment was evident in the area. Some elk sign was noted as was bear sign. Livestock grazing is not occurring on this portion of the allotment due to the steep terrain and is not an issue. The site appears to be in late seral stage or nearing climax. The allotment was determined to be meeting Standard 4 for Canada lynx.

6. Spruce Gulch Common

A site specific consultation was completed for grazing within the Spruce Gulch Common Allotment in November of 2000. Since this time, a formal LHA has been completed. A wildfire burned some of the lynx habitat within this allotment in 2008.

The Spruce Gulch Common Allotment is located in the Rifle-West watershed. A formal LHA was completed for this watershed in 2004/2005. One site within lynx habitat was visited. Mapped habitat in the allotment is located on steep side hills or within steep drainages that are not being accessed by livestock. Lynx habitat in the allotment was in good condition.

Understory vegetation was in good condition and aspen and conifer trees were healthy. Based on the overall condition of habitat, Standard 4 for Canada lynx was being met.

7. Red Hill Common

A site specific consultation was completed for grazing within the Red Hill Common Allotment in November of 2000. Since this time, a formal LHA and a lynx habitat evaluation have been completed.

The Red Hill Common Allotment is located in the Eagle River South watershed. A formal LHA was completed for this watershed in 2002/2003. For the most part, the Red Hill Common Allotment was meeting land health standards. Overall, ground cover was adequate to protect soils and vegetation was in fair to good condition. Some issues were found on the lower elevation sagebrush sites. Vegetative communities in upper elevations were in much better condition. All sites within mapped lynx habitat were found to be meeting Standard 3 and provided suitable habitat for lynx and their prey.

Habitat assessments specific to Canada lynx were completed for this allotment in 2001. One site was visited within the allotment. The habitat was diverse with good vegetative structure. Vegetation was healthy with good production. Aspen at the site were healthy with 3 different age classes noted. Some recruitment was evident. Mountain mahogany was moderately browsed and elk and some deer sign was evident. No livestock sign was noted and use was obviously slight. The allotment was meeting Standard 4 and was providing productive habitat for Canada lynx.

8. East Divide Common

A site specific consultation was completed for grazing within the East Divide Common Allotment in December of 2001. Since this time, a lynx habitat evaluation has been completed.

Habitat assessments specific to Canada lynx were completed for this allotment in 2002. Three sites were assessed in lynx habitat on this allotment. Aspen were very healthy and large but age class diversity was somewhat lacking. At least 3 age classes were noted and some regeneration was occurring across the area but small saplings were being stripped of their leaves. This was likely from elk and possibly cattle. It appeared that aspen regeneration may be being hindered across large portions of the allotment. Conifers were in good condition with smaller and larger trees present. Understory was diverse with good structure and good productivity. Livestock sign was present but use was light in the forested, heavy canopied areas. Small openings showed slightly higher use on grasses. Overall, the allotment was found to be meeting Standard 4 and providing suitable and productive habitat for Canada lynx.

VI. Effects of Proposed Action on Canada Lynx

The general effects of livestock grazing were disclosed and discussed in the Programmatic Consultation ES/GJ-6-CO-03-F-013, which this BA is tiered to. Site specific effects related to the renewal of these twelve grazing permits are discussed below.

VI.1. Proposed Action(s) Relative Effects to Lynx Productivity Risk Factors

The biggest potential effect to lynx is livestock competition with lynx prey species for forage resources. Any reductions in forage that would lead to a reduction in prey or prey density could result in lower lynx productivity over time. However, based on existing range data for these allotments, utilization levels within lynx habitat are generally in the slight to light category with occasional areas of moderate use. Given the grazing management strategies in place, it is unlikely that any allotment will receive heavy or severe grazing pressure. Livestock are distributed across the allotments primarily within the rangeland habitats (sagebrush, p/j) outside of forested lynx habitats, and generally do not concentrate in any one area too long.

All of the allotments containing lynx habitat and addressed in this BA are being managed to meet one or more of the following guidelines:

- Periodic rest or deferment from grazing during the critical [plant] growth periods
- Adequate [plant] recovery and regrowth periods
- Opportunity for seed dissemination and seedling establishment

Each of the allotments incorporates at least some rest during the growing season and adequate plant recovery and regrowth periods via the implementation of rotation, deferral, or season of use. As such, it is likely that opportunities for seed dissemination and seedling establishment are occurring, given localized climate conditions related to moisture capture and drought. Managing these allotments within the above guidelines should ensure that these allotments continue to meet the Public Land Health Standards. Water developments for livestock are generally located within the sagebrush – grassland habitats away from mapped lynx habitat. This helps to distribute livestock use away from the more densely forested habitats, and limits use within riparian areas.

VI.2. Proposed Action(s) Relative Effects to Lynx Movement Risk Factors

General Movement and Dispersal

The LCAS identified several risk factors that could affect lynx movements, including the alteration of shrub-steppe habitat which could contribute to reduced incidence and success of lynx dispersal across shrub-steppe habitats. It is plausible that over grazing by livestock could be a factor contributing to the decline of the shrub-steppe plant community, thus reducing forage availability to the point that it limits leoprid population density. The LCAS states that livestock grazing within shrub-steppe within the elevational ranges of forested lynx habitat should be managed to maintain or achieve mid seral or higher condition, to maximize cover and prey availability.

Identified Habitat Linkages

Four habitat linkages have been identified and mapped within the GSFO. These linkages are comprised of public, private, state and USFS lands and serves as likely corridors in which lynx

might travel during dispersal movements. These corridors link larger forested landscapes located on adjacent White River and Routt National Forest lands. Small portions of the each linkage provide the vegetative components (summer forage, winter forage, and possibly some denning habitat) necessary to support and possibly sustain lynx. However, the majority of vegetation located within these linkages does not provide lynx habitat. These vegetative communities provide habitat for alternative prey species and cover for movement and dispersal. The Antelope Creek Allotment is located within the Egeria Landscape Linkage.

It is plausible that over-grazing by livestock could be a factor contributing to the decline of the functionality of landscape linkages. A reduction in forage availability could limit prey population density. In addition, a reduction in vegetative cover could impair lynx's ability to successfully move through the landscape.

However, based on how the Antelope Creek Allotment would be managed, impacts to lynx and lynx habitat should be insignificant. The permit calls for growing season rest and ample opportunity for plant regrowth and recovery. Seed production, dissemination and seedling establishment should not be hindered under the proposed management schemes. Continued livestock grazing should create no barrier to potential lynx movement.

VII. Inter-related and Inter-dependant Effects

Wild ungulates also play a role in the overall condition of vegetation across the 568,000-acre GSFO. The GSFO serves as primary mule deer and elk winter range for several CDOW Data Analysis Units (DAU's). Most elk move to high elevations and other landownership (National Forest Service Lands) as snow melts in the spring. Deer disperse more than elk across all elevations in the summer. Thus, grazing ungulates are relatively constant on many portions of all allotments throughout the year. The conditions of all allotments change annually with varying weather patterns (e.g. drought) and varying ungulate utilization and distribution. Elk in particular may be having some localized impacts to aspen stands, due to high utilization levels on young saplings. Deer concentrate more heavily on browse and may be partially to blame for poor sagebrush condition in some heavily used winter ranges.

VIII. Cumulative Effects

As it pertains to ESA, cumulative effects are defined as: *those effects of future State or private activities, not involving Federal activities that are reasonably certain to occur within the action area of the Federal action subject to consultation.* [50 CFR 402.02]

Cumulative effects do not include any past or ongoing action, but "involve only future non-Federal actions". Future Federal actions requiring separate consultation (unrelated to the proposed action) are not considered in the cumulative effects section.

In addition to public lands, the GSFO planning area contains a large amount of private land, and some scattered parcels of state land and state wildlife area lands. An undetermined amount, and diverse variety of land management activities are ongoing on private and state lands adjacent to BLM administered lands within the GSFO. Future actions reasonably certain to occur are numerous and varied on these lands. Human development is occurring at an ever-increasing rate as native rangelands and ranches are being converted to residential and commercial properties. This trend is reasonably certain to continue to some degree. In addition, farming, ranching, and various recreational activities are ongoing and are reasonably certain to continue on other private and state lands. Livestock grazing is also occurring on some private and state lands within the area, and is reasonably certain to continue in some areas despite an overall reduction in grazing and other agricultural activities due to the selling of ranches and resulting residential and commercial developments.

Cumulatively, many of the future actions planned on private and state lands may have some undetermined effect on lynx and lynx habitat. The proposed action is not anticipated to result in negative cumulative impacts to lynx when viewed in conjunction with those activities currently occurring and reasonably certain to occur on adjacent private and state lands.

IX. Determination of Effects

Based on the proposed management, the proposed renewal of these twelve livestock grazing permits "MAY AFFECT, BUT IS NOT LIKELY TO ADVERSELY AFFECT" the Threatened - Canada lynx. Furthermore, the proposed action is in conformance with the recently completed programmatic consultation for lynx regarding the GSFO livestock grazing program. None of the actions will result in the destruction or adverse modification of Fish & Wildlife Service designated critical habitat.

Due to this determination, Formal Consultation is not determined to be necessary. This Biological Assessment is being submitted in order to obtain concurrence with our determination that management of these twelve grazing allotments is within the guidance outlined in the Programmatic Biological Opinion. In addition we seek to have this BA appended to the Programmatic Biological Opinion.

Rationale:

1. Permit standards and guidelines that result in acceptable residual herbivore forage and acceptable riparian conditions are design features of all BLM livestock grazing permits/allotment management plans as directed in the *Glenwood Springs Resource Management Plan* (1984, revised 1988), and *Colorado Public Land Standards for Public Land Health and Guidelines for Livestock Grazing* (1997).

2. Range and Land Health Assessment data shows that lynx habitat within these twelve allotments are in good condition. Where livestock grazing is occurring utilization has generally been light with some areas of moderate use. Light to moderate use should leave sufficient forage for lynx prey species and provide adequate cover for movement and dispersal.

DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT GLENWOOD SPRINGS FIELD OFFICE FINDING OF NO SIGNIFICANT IMPACT

Grazing Permit Renewal on the Spruce Gulch Common Allotment.

DOI-BLM-CO140-2009-0051-EA

Finding of No Significant Impact

I have reviewed the direct, indirect and cumulative effects of the proposed action documented in the EA for the grazing permit renewal on the Spruce Gulch Common Allotment. The effects of the proposed action are disclosed in the Alternatives and Environmental Impacts sections of the EA. Implementing regulations for NEPA (40 CFR 1508.27) provide criteria for determining the significance of the effects. Significant, as used in NEPA, requires consideration of both *context* and *intensity* as follows:

(a) Context. This requirement means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short and long-term effects are relevant (40 CFR 1508.27):

The disclosure of effects in the EA found the actions limited in context. The planning area is limited in size and activities limited in potential. Effects are local in nature and are not likely to significantly affect regional or national resources.

(b) Intensity. This requirement refers to the severity of the impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. The following are considered in evaluating intensity (40 CFR 1508.27).

1. Impacts that may be both beneficial and/or adverse.

Impacts associated with the livestock grazing permit renewal are identified and discussed in the Environmental Impacts section of the EA. The proposed action will not have any significant beneficial or adverse impacts on the resources identified and described in the EA.

2. The degree to which the proposed action affects health or safety.

The proposed activities will not significantly affect public health or safety. The purpose of the proposed action is to allow for multiple uses while maintaining or improving resource conditions to meet standards for rangeland health in the allotment. Similar actions have not significantly affected public health or safety.

3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

There have been 4 historic properties identified on this allotment that are eligible or potentially eligible for listing on the National Register of Historic Places.

4. The degree to which the effects are likely to be highly controversial.

The analysis did not identify any effects that are highly controversial.

5. The degree to which the effects are highly uncertain or involve unique or unknown risks.

The possible effects on the human environment are not highly uncertain nor do they involve unique or uncertain risks. The technical analyses conducted for the determination of the impacts to the resources are supportable with use of accepted techniques, reliable data, and professional judgment. Therefore, I conclude that there are no highly uncertain, unique, or unknown risks.

6. The degree to which the action may establish a precedent for future actions with significant effects or represent a decision in principle about a future consideration.

This EA is specific to the Spruce Gulch Allotment. It is not expected to set precedent for future actions with significant effects or represent a decision in principle about a future management consideration in or outside of this allotment.

7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

The analysis in the EA did not identify any related actions with cumulatively significant effects.

8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant, cultural, or historical resources.

There have been 4 historic properties identified on this allotment that are eligible or potentially eligible for listing on the National Register of Historic Places. A determination of "**Conditional No Adverse Affect**" has been made. Mitigation measures have been identified to prevent any possible adverse affects.

9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

There is no designated critical habitat for any listed Threatened or Endangered species within the project area. The EA discloses that the proposed action is not likely to adversely affect any species listed as threatened or endangered.

10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

The proposed action does not violate or threaten to violate any Federal, State or local laws or requirements imposed for the protection of the environment.

Based upon the review of the test for significance and the environmental analyses conducted, I have determined that the actions analyzed in the EA will not significantly affect the quality of the human environment. Accordingly, I have determined that the preparation of an Environmental Impact Statement is not necessary for this proposal.

Inda Authorized Official

Glenwood Springs Field Office

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<u>4/13/2009</u> Date